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# THE KEYSTONE *Defender*

OL. 3 No. 3 STATE COUNCIL OF CIVIL DEFENSE, HARRISBURG, PA. MAY, 1954

## NATIONAL ALERT, JUNE 14-15TH

"OPERATION ALERT," the nationwide civil defense training exercise will be conducted on June 14-15th, with all forty-eight states, as well as Hawaii, Puerto Rico, Alaska and the ten Canadian provinces participating.

The exercise, which has been planned for many months, will be based on a hypothetical atomic attack on 42 selected critical target areas in this country; also on Honolulu, Hawaii; and San Juan, Puerto Rico.

The purpose of this tremendous exercise is to increase the operational efficiency of all civil defense organizations, local, state, regional, and national, and to provide realistic training. The exercise is designed also to disclose weaknesses in emergency operations, and indicate where improvements are required. No one can force any community to take part in the training. However, it is hoped that every town, every industrial plant, every office building, every Mass Care Center, every school, every hospital, and every place where lives are involved, will take advantage of this alert to drill and train their people, and to test their own plans. Sweeping publicity will be appearing in the national magazines, and coast-to-coast on radio and TV networks. Local CD organizations would do well to capitalize on this widespread publicity, and use this opportunity to its fullest.

Pennsylvania is planning not only the most complete possible training of its civil defense personnel, but also full public participation, on June 14th. It is urged that not only County but also Township control centers be in operation.

The exercise will start in the target cities with the simulated attack, followed by local assessment of hypothetical casualties and damage, and determination of the assistance required. This information will then be transmitted to State control centers, and from there to Regional and National headquarters. The Federal offices will analyze the total national picture, and will determine actions required to provide necessary assistance on a Federal level. Resources hypothetically used will only be those assumed to be *actually available* at the time of the exercise, as shown by civil defense inventories and stockpiles. Again therefore, this matter of LOCAL INVENTORIES BECOMES OF PARAMOUNT IMPORTANCE. If we do not know what we have to work with, how can we operate?

Before June 14th every township is urged to complete its surveys and inventories, and send the information immediately to the County and Area control centers, so that it may be used in the forthcoming exercise. Without such information, much of the value of the alert will be lost. This includes inventories of existing medical equipment and personnel; available transportation of all types; welfare resources and personnel; fire equipment; heavy road-clearing and rescue equipment, and the like; all these are basic to all planning, and to all emergency operations. It is long past time they were completed.

For purpose of the June test, it will be assumed that an attack on the continental United States and on Alaska will be carried out by aircraft carrying atomic weapons. The attack on Hawaii and Puerto Rico supposedly will be made by guided missiles with atomic warheads, launched without warning from submarines.

The Department of Defense, the Office of Defense Mobilization, the

*(Continued on page 8)*

## What's In A Name?

IN THE MIDDLE of Manhattan is an apartment house, 20 stories high, concrete with a brick exterior, 16 elevators, a population of 1600 including 100 children and 80 dogs.

This building has a Chief Air Raid Warden, as well as a Warden and an alternate on each floor, trained in both a warden's and a first aid course. In addition, a census has been taken of all residents; a communications system is "in the works"; a resident doctor has established a medical set-up. All shelter areas have been marked, operations locations have been selected, and many of the tenants have received, at their own request a 12-hour period of instruction as to what to do in disaster, what supplies they should have, instructions as to emergency fire control, sewage disposal, and water purification. (CDRA Memo 1/54).

There is a point to note in this story:

> The recruitment of members of the Corps for this building lagged until the word "disaster" was substituted for the word "defense." Then it became successful.

Frequently it has been suggested on these pages that when we discover something does not work, changes should be substituted. The matter of a name is a case in point. Over and over again it has been found that people who are not the least bit interested in "defense," those people who are convinced we will never be attacked, are often quite disaster-conscious. They will work hard for "disaster-preparedness," in terms of floods, explosions, tornadoes, and the like. Since that is the case, why don't we make more use of the term?

What's in a name?

Plenty. Let's use the one that works the best, and get moving.

PENNSYLVANIA STATE LIBRARY
DOCUMENTS SECTION

# CIVIL DEFENSE AND THE H-BOMB

*By* Dr. Richard Gerstell, *Director of State Council of Civil Defense*

Development of the hydrogen bomb does not mean that civil defense is dead. Neither does it mean that present plans and programs should be tossed out the window. Let's look calmly at the facts.

H-bombs kill and destroy by release of three forces. These are blast, heat, and radiation. Practically speaking, therefore, the sole difference between fusion and fission bombs—we call them H-bombs and A-bombs—lies in their relative powers of death and destruction.

Prompt warning of impending attack was highly important when we faced only A-bombs. With H-bombs hanging over our heads, each minute available for self-protection measures becomes even *more* vital.

Prior to completion of the State Council's instantaneous warning system, 15 to 25 minutes were required to fan attack warnings out over the State by radio and "chain" telephone calls. The new equipment does the same job in a matter of seconds. Certainly the hydrogen bomb does not call for scrapping the bell-and-lights network. The new weapon vastly increases the value of the electronic alarm system, and makes it more important than ever that every city, town, and borough equip itself to sound the warning quickly to the public.

Taking a second example, the State Council's $4 million medical stockpile at Indiantown Gap—now holding materials enough to provide preliminary medical treatment for 1,650,000 casualties—was absolutely esential two years ago. Development of the H-bomb certainly does not mean that we should throw away these critical supplies. Insead, we are compelled to give serious consideration to increasing the stocks already on hand. In the counties and the cities and towns, similar serious consideration should be given to the training of vastly increased numbers of men and women to administer the medical aid.

**COMMONWEALTH OF PENNSYLVANIA**

**STATE COUNCIL OF CIVIL DEFENSE**

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Dr. Richard Gerstell, *Director*
Mr. N. L. Wymard, *Deputy Director*

*Free subscriptions to this publication may be obtained by writing to the State Council of Civil Defense, Capitol Building, Harrisburg, Penna. Address: Miss Alison Raymond, Editor.*

As a third example, let us consider the emergency welfare program. A-bombs would leave tens of thousands of people in need of temporary housing, feeding, and clothing. In this respect, H-bombs simply change the common denominator used to compute possible requirements. Today's needs are figured in terms of hundreds—not tens—of thousands of people. The emphasis is even more strongly directed to the need for rural areas to realize the important role they will play in receiving and caring for these homeless.

Finally, let's look at our auxiliary police requirements. While we have had our sights set on 100,000 auxiliary policemen for Pennsylvania, we will probably have to raise these sights, and shoot instead for 250,000 or 300,000.

At the present time, and for at least eighteen months to two years until the radar screen and other warnings are greatly increased, we still can count on only 15 minutes' advance warning of attack from the air. Should we eventually achieve one or two hours' warning, it may then be possible to take some measures to thin out our urban populations just prior to an impending strike. To direct any such exodus, the need for many more, and for more completely trained auxiliary policemen becomes painfully obvious. It is also quite possible that areas may have to be evacuated *after* H-bomb attacks, because of fire, radiation, or other causes. The need again, therefore, is for more, not less, civil defense preparedness.

Dr. Richard Gerstell

The State Council of Civil Defense recently has urged every Pennsylvanian city to make detailed studies of what might be done to disperse its inhabitants prior to attack. But, while we vigorously push forward a program aimed at early warning, we must never forget the fact that the enemy simultaneously will be working equally hard to perfect inter-continental guided missiles which can drop nuclear warheads in our midst with no warning whatsoever. We already know that atomic bombs have now been made so small that they are a potential weapon for saboteurs. And so, as weapons develop, we may be carried around full-circle. Conceivably, instead of one or two hours' warning, we may have no warning at all.

Much as we may dislike and fear it, the hydrogen bomb is here to stay. We have no choice. We *must* learn to live with it. As with atomic bombs, today's best chance for survival is simply to "duck and cover." While this time-proven measure no longer holds the same relative factor of safety it once did, the practice nonetheless will save many lives—possibly yours.

To sum up, let's put it this way. Development of the H-bomb definitely does NOT render all our plans and programs for civil defense obsolete. While the new weapon admittedly will require added burdens and some shifting of emphasis—for example, the strengthening of programs in those rural areas which offer haven for people driven out from target areas—its basic effect should be to spur us on to the even more vital job now confronting us. Today the question everyone must ask himself is:

"What can I do for civil defense?" and not "What can civil defense do for me?"

As President Eisenhower has said, no one can guarantee what, in madness or desperation, the men of the Kremlin may do. It would, therefore, be folly not to be prepared *to the best of our ability* to meet whatever disaster could occur.

# LET'S FACE IT — Medical Divisions are Pitiful

IN ALL HONESTY, scarcely a County in this State can say it has developed its medical resources to the point where it could handle even the first few hours of a disaster, or could send substantial, organized aid to a nearby area.

Part of this lack of medical preparedness is probably caused by the fact that the task of organizing the medical division has been given wholly to doctors. Doctors are extremely busy people. Speaking frankly, few of them have bothered much about it. For the most part, they have given lip-service; they have attended meetings, but they have done little else.

Since the current set-up, which has been in effect about two years in most places, has yielded pitifully few results, it might be well for local and County Directors to think in new terms on the medical program.

Inasmuch as professional medical people and existent medical resources will admittedly be woefully inadequate in an emergency, much of the job consists of augmenting them with non-professional workers—first aid teams, ambulance teams, and the like—from the citizenry.

That being the case, much of the work of the medical division could be done perfectly well by men and women who are NOT doctors, working as deputies to the Medical Director. By re-dividing the load, by appointing deputies each with his own or her own well-defined objectives, it may be possible to get the medical problem off dead-center.

Let us recognize that the Medical problem falls into two parts:

1) Strictly medical, dealing with medical supplies, professional personnel, establishment and expansion of hospitals;

2) Non-professional, organizing job to augment the above and give it mobility.

It is suggested that three deputies in addition to those already established, might be appointed as follows:

*Deputy I. First Aiders and Nurses Aides.*

a) To compile lists of all individuals in the County with current qualification and certificates for First Aid and Nurses' Aide.

b) To contact each one of these people, enroll them in CD if possible, *then assign them to a designated medical unit with a specific assembly point and leader.* (Note: a list of people is of minimum value until this has been done.)

c) Working with schools, church groups, industries, and local organizations, put on a vigorous campaign to increase the number of trained medical aides of all kinds.

Such a deputy might well be a Red Cross representative.

*Deputy II. Ambulances.*

To organize and develop a pool of available ambulances or emergency-equipped vehicles to serve as ambulances—also *assigned in units with specific assembly points.*

This deputy might well be a member of the Junior Chamber of Commerce, Rotary, or other businessman in wide contact with local merchants and industries owning vehicles.

*Deputy III. Litter Bearers and Litters.*

To develop teams of litter bearers and a stockpile of litters.

This deputy might be an active Physical Education instructor, or a Boy Scout leader. He would work primarily with high schools, boys' clubs, and senior scouts. Strong boys, below military age, will make excellent litter bearers if trained.

Such a plan would leave the Medical Division in the hands of the Medical profession, but would divide the heavy load, relieving the medical men of those purely non-professional aspects of the task which, none the less, badly need to be done. In our opinion, it would give substantial impetus to the increased development of local resources.

# Penna. "Bell-and-Lights" Completed

THE FINAL LINK in the bell-and-lights warning system for Pennsylvania was completed on March 24, 1954.

Fifteen separate networks make it possible to alert almost the entire state at one time. The networks have their headquarters in Allentown, Altoona, Butler, Erie, Greensburg, Harrisburg, Lancaster, Philadelphia, Pittsburgh, Punxsutawney, Reading, Scranton, Washington, Williamsport, and Wilkes-Barre.

The basic "bell-and-lights" network is paid for by the State Council of Civil Defense. At the present time, there are about 1000 receiving stations in the network; air raid warnings could now be spread through most of the State in a matter of seconds, rather than minutes.

# "Man of the Year"

COLONEL LLOYD M. MORRIS

WE WONDER how many communities would select as "Man of the Year" their Civil Defense Director? This well-deserved honor was paid recently to Colonel Lloyd Morris, director for Civil Defense for Blair County and the city of Altoona.

At a weekly luncheon meeting, the Altoona Kiwanis Club named Col. Morris as its selection for 1953's outstanding citizen. The annual selection is based on the man's contribution during the past year towards "his community and the general public."

Said the nominating committee: "Colonel Morris' job as director for the combined city and county units has been that of an uphill struggle. The Blair-Altoona C.D. unit has gained distinction throughout the state; many have been impressed with the organization now in operation there; many have copied the structure of city-county merger worked out by Altoona's "Man of the Year."

Col. Morris was selected by the Kiwanis board as:

"The man devoting most of his personal and free time, plus his own devotion, to a work that could mean the saving of thousands of lives in the event of an attack from future enemies."

Several of his colleagues credited him as "one of the hardest working individuals we know."

Col. Morris is a civil engineer, who works for the Pennsylvania Railroad. He is a graduate of Penn State.

*(Taken from the Altoona Mirror Feb. 18, 1954.)*

# SWEDEN IS GOING UNDERGROUND

*(Photo from American-Swedish News Exchange.)*

*First stages of building a bomb-proof shelter in solid granite.*

For four years and more, the United States has bent major efforts to alerting and arming its allies in the North Atlantic Treaty Organization against the dangers of attack. Yet, oddly enough, the European country that is taking the threat to its people and industry the most seriously is not even a member of NATO! The home defense measures taken by the United States pale besides the efforts of this "neutral" nation. Sweden, with a population of seven million—one 23rd as many as the U. S.—is spending 17 times as much per capita on civil defense.

For vast underground shelters, for supplies, training and promotional work, the Swedish government is spending $28,000,000 this year—or four dollars from every Swede. We in America are spending per capita 23.5 cents, with our budget of $37,700,000.

So firmly does the Swedish government believe in the CD effort that 7% of their military budget is spent for civil defense. If America were spending 7% of her military budget it would amount to about 2½ billion. Instead, we are spending ⅒ of 1%. On this basis, the Swedish effort is 70 times greater than our own—the results look it. In brief, Sweden has defense for her people; we, after four years of talk, still do not.

One of the most striking points of Sweden's civil defense is that national law *requires* everyone from 15-65 (except military personnel) to take CD training. They must devote at least 60 hours a year to it. A host of schools—fire-fighting, nursing, gas defense, first aid, and the repair and guarding of communications and key plants—have been established.

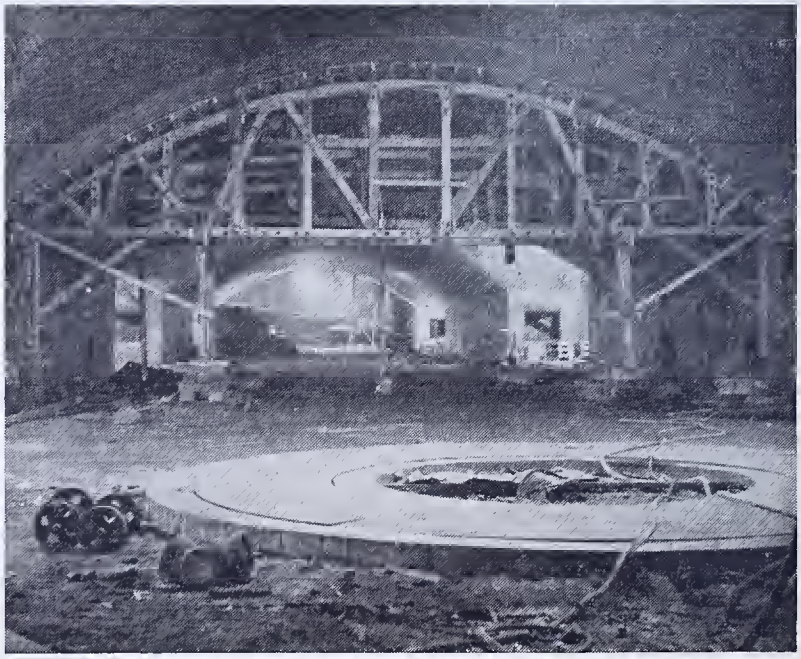
Another civil defense law *requires* builders of dwellings for three or more families to provide adequate shelter at their own expense. Many industrial plants have financed their own training and shelter arrangements. A large steel mill not far from Stockholm presents a bristling front of guards, passes, barbed wire and shelters.

Completed deep shelters in Stockholm can now accommodate 80,000 persons, and in five to seven years authorities expect there will be enough deep space to hold 400,000. This is half the capital's population, and the situation is similar in other Swedish cities. The balance would be evacuated to rural areas under extensive and de-

*(Continued on page 8)*

*(Photo from American-Swedish News Exchange.)*

*One of Sweden's underground storerooms.*



*(Photo from American-Swedish News Exchange.)*

*A fighter plane hangar under construction. Note the turntable for the planes.*

# RAYS AND RADIATION

*(Taken largely from U. S. Army Soldiers' Manual for Defense against CBR Attack-FM21-41.)*

Most of us understand the blast and heat effects of an atomic bomb; there is, still however, a considerable body of myth and misunderstanding regarding the danger of radiation.

One thing that must be realized is that while an A-bomb holds more destruction than man has ever before wrapped in a single package, its total power is definitely limited. Not even the H-bomb can blow the earth apart or kill us all by mysterious radiation. The blast and heat effects of both A and H bombs are similar to ordinary bombs, though greatly magnified. Radiation is the only way in which these explosions actually differ from ordinary explosions.

That is why radiation has received so much attention. The truth is, however, bad though it is, that radiation is the *least* important effect of an atomic explosion. Yet, to many, it gives an air of mystery. Predictions were made that Hiroshima would never again be a safe place to live. Rumors dealt with horrible injuries and sickness, due to radiation. But Hiroshima has been rebuilt; people and crops and livestock are healthy and normal. Heat and blast cause most of the injuries. It is estimated that at least 50% of the deaths in Japan were caused primarily by burns. People as far away as two miles received painful burns on exposed face and arms. Flying glass and debris caused a high proportion of the remaining Japanese deaths. Only about 10% were caused by radiation; with the new, more powerful weapons, the range of danger is increased, but the truth remains that fire and blast will still cause the bulk of the damage; most of the casualties will still be due to fire, debris, and flying glass, though at greater distances.

Like germs, rays cannot be seen, heard, tasted, smelled, or felt. Like X-rays, they tear down body cells, especially the blood-forming cells. Radioactivity is somewhat similar to X-ray. Alpha, beta, and gamma rays are expelled with tremendous force at the time of the explosion. Alphas can be stopped by clothing, by thick paper, and by the skin; betas will not penetrate buildings, but gammas can pass through concrete or earth, just as do radio waves, which can be picked up underground or in deep buildings.

You can acquire an overdose of radiation:

a) By being caught in the open when an atomic bomb explodes. If you are far enough from the bomb to be protected from its blast or heat, don't worry about radiation. If you are in the open, within range, you have probably "had" it from blast and heat anyway!

b) By remaining too long in a radioactive area.

How will you know if you have had an overdose? For the first several hours, you will probably not know. Then you will feel weak and begin to vomit. You may or may not have some fever and gastric disturbances. The larger the dose you have had, the quicker you will get sick. You might feel below par for several days. But in spite of it all, you would still stand a *better than even* chance of complete recovery. Despite the scare stories, radiation sickness is rarely fatal. First aid treatment should be similar to that given for shock. Scrupulous care should be taken to prevent infection of any wounds as reduced blood formation makes the body especially susceptible to infection. If you do start to vomit, don't panic. You may be sick merely from nerves, from the sights you would be seeing, or from tension, and not from radioactivity at all. Keep warm and lie down somewhere. Chances are, you will be all right.

## Reactor Approved for Penn State

The 1953 annual report of the Atomic Energy Commission contains this paragraph:

"Pennsylvania State College submitted a formal proposal to build and operate at its own expense a 100-kilowatt research reactor and its request for the loan by AEC of fuel material was given preliminary approval. Construction is expected to begin early in 1954. The reactor will be a light-water-cooled and moderated thermal neutron system using enriched uranium fuel. The college and the AEC cooperated under a 'no fund' contract in detailed studies which led to the proposal. The reactor will be built and operated without financial assistance from the AEC."

### *Air Bursts*

Because air bursts do the greatest amount of damage, one can assume they are the kind we must expect most often in any third World War.

Air bursts leave almost no radiation on the ground. By the time the debris has fallen and you dare raise your head to peer around, radiation will no longer be a danger, except in freak conditions of air currents, where radioactive ash falls again instead of rising to the stratosphere. When ash falls, however, it is visible, so you will see it and be able to wash it quickly off. If, by taking cover, you protect yourself from heat and blast, you will also be protected from the dangerous gamma rays. Even without shelter, if you lie flat on the ground you will be more protected than if you remain standing.

### *Ground Bursts*

The area of damage of a ground burst is smaller than from an air burst. A large crater is blasted out. Ground explosions result in heavy concentrations of lingering radiation; furthermore, the dirt and dust falling after the explosion become highly radioactive. Do not remain in the area any longer than you can avoid until monitoring teams can tell you how "hot" it is. Get away from there fast.

### *Water Bursts*

Those living near rivers, lakes, or other water, must take water bursts into account. These will create the least damage in terms of blast and fire. However, enormous amounts of water will be thrown into the air. This will descend again in rain, mist, and fine droplets over a wide area, and will be highly radioactive. If a water burst occurs, stay inside and under cover for as many hours as you can.

What can you do to protect or decontaminate yourself? Any type of clothing gives some protection against radioactivity. In order to increase this protection, try to grab something to cover you as you fall to the ground. Sheets of newspaper, an old board, a raincoat, anything that will serve to keep radioactive dust off you is helpful.

When you go into a "hot" area, wear gloves. Touching radioactive material with bare hands will result in serious burns. Any sort of gloves will do. The dust in the air in a "hot" area will presumably be radioactive, so do what you can to avoid inhaling it. A wet, or even a dry, handkerchief tied over your face will help. Serious internal injury will occur if you inhale such dust.

*(Continued on page 6)*

# WHAT HAS FCDA BEEN DOING?

Recently FCDA released its annual report for the year 1953. Some of the accomplishments listed are as follows:

*Project East River.* The final report of more than 100 leading scientists and experts which included more than 200 recommendations for Civil Defense, was submitted to the FCDA, the Department of Defense, and the Office of Defense Mobilization in January 1953. This impartial study has aided tremendously in expediting realistic CD planning and operation.

*Operation Doorstep.* National interest in the practicality of Civil Defense preparedness was greatly stimulated by the public atomic test on March 17, 1953. Millions of people, by newspaper, television, radio, newsreels and magazines, got the story of what happened to typical American homes and cars when they were subjected to atomic blast.

*Conelrad.* The Conelrad system became operative on May 15, 1953. A nationwide test in October demonstrated that it was generally practical.

*Civil Defense Workers.* The number of CD workers actively enrolled across the country increased by nearly 10% in 1953.

*Reorganization of FCDA.*

The agency was reorganized; and personnel saving of more than 10% was accomplished. As of Dec. 31, 1953 FCDA has 720 employees. Of these 507 are in the Washington office, 213 in the field.

*Contributions Growth.*

In fiscal 1953, FCDA contributed nearly $15 million to match equal sum from the States and cities, for CD organizational equipment and supplies.

*Stockpiles.*

An additional $19 million worth of emergency medical supplies and equipment and one million dollars of engineering equipment were added to Federal reserve stocks which will be available to supplement local supplies in the event of attack, during the year 1953.

(Note: The total FCDA has invested in emergency supplies since 1951 is slightly over $85 million.)

In describing how FCDA funds were spent during the year, the report said:

In 1953, emphasis continued to be placed on balancing the relationship between the Federal reserves of emergency supplies and equipment, and the development of local reserves through the contributions program. States and cities were encouraged to give priority of investment to immediate local needs, while FCDA gave priority to those items which would be needed to replenish local stocks in the immediate post-attack period.

During the fiscal year 1953, $43 million was appropriated by Congress and made available for expenditure for CD purposes. Of this amount, $8 million was for operations; $15 million for Federal contributions to states; and $20 million for stockpiling of emergency supplies and equipment.

"The state and local governments had $40 million available, of which $25 million was specifically earmarked for shelter for matching Federal contributions in fiscal 1953.

"Over $99 million was available in emergency and contingency funds; however, portions of these funds can be expended only in case of actual attack or other national emergency.

"Up to June 30, 1953, about $72 million had been invested under the contribution program—half Federal, half state. For the fiscal year of 1954, $10,500,000 has been allocated to the states for matching purposes."

Governor Peterson believes that the only way we can keep Civil Defense alive in a period of "peace" is to use it as a peacetime disaster relief organization. In a chapter dealing with natural disasters, the Annual Report says:

"Tornadoes, floods, explosions, fires, and countless other emergency situations across the nation became the proving grounds for civil defense preparedness. In every case where civil defense workers were at the scene, their contribution to alleviation of the situation, whether of minor or major nature, was indisputable.

"An object lesson in the value of having a prepared organization was provided by a comparison of the Waco and Worcester tornadoes. Waco was not prepared for operation at the time the tornado hit. As a result, confusion, wasted effort, traffic congestion, and delay in getting emergency operations underway occurred.

"In Massachusetts, on the other hand, well-organized civil defense was able to get underway soon after the tornado struck and initiate speedy, efficient, rescue efforts.

"The disasters of 1953 demonstrated that, although in an emergency people are willing and anxious to offer their help, they must have leadership, training, and organization to be of any benefit. Civil Defense can provide that leadership, training, and organization. The catastrophes of 1953 clearly showed that the same men and women who are organized, equipped, and trained to counteract an atomic blast, can be effective on the homefront in times of flood, earthquakes, tornadoes, and other natural disasters."

# RAYS AND RADIATION

*(Continued from page 5)*

The beta particles, like blister gas, have a delayed reaction; they, too, blister the skin though do not penetrate deeply into the body. Clothing will protect you from beta particles.

If you think you have been contaminated, take off your clothing, being careful not to shake off dust as you do it. A light spraying of water will prevent this. Then take a good bath, using soap. Do not forget your fingernails and other areas where dirt, presumably contaminated dirt, tends to gather. Bathing is the best way to remove radioactive contamination from your body. You do not need any special soap. Ordinary soap, warm water, and a good brush will do the job. The Japanese fishermen got rid of most of the "hot" ash by washing; their trouble came chiefly from handling "hot" nets and ropes for many hours afterwards, without realizing that these were contaminated, after the March 1st H-bomb.

Do not bury or burn your clothing. It is not necessary. Simply wash them thoroughly in soapy water, and hang them in the air. Radioactivity "decays" quite rapidly.

*Food*

Food and water can become contaminated. Uncovered food and water in a radioactive area are not safe. However, canned food, water that is covered (or in pipes or boilers), food that is in refrigerators or cabinets where it is protected from "dust" is safe to use and should not be destroyed.

*Summary*

Radiological warfare is not something mysterious—it is not the bomb's greatest threat; the sickness it creates is rarely fatal; it does not harm sex; it does not create permanent baldness. Protection taken against blast and flash will also protect in large measure against radiation. Ground and water bursts present a far greater radioactivity problem than air bursts because they create lingering radiation. It will be safe to go into any area following the more probable air bursts as soon as one can withstand the heat or struggle through the debris.

A transparent surgical dressing that doctors can spray onto a patient's wound out of an aerosol bomb container is being distributed by Aeroplast Corp. of Dayton, Ohio. The plastic material originally was developed in cooperation with the U. S. Air Force.

# A KEY FIGURE AFTER ATTACK

One of the people least considered on most civil defense staffs today but one who would be most vital if we were attacked, is the Public Information officer.

Pennsylvania lags far behind many states in making plans for the handling of official news as quickly as possible following disaster. Nearly everyone agrees that newspapers, radio and TV would play an enormous part in reducing panic and issuing instructions to the public. Nevertheless few have taken steps to integrate these media into their CD organizations so that accurate information would reach them quickly.

Connecticut recently announced that two-thirds of its 169 cities and towns have local Public Information officers who would play key roles in gathering and distributing emergency information; 51 newspapers and radio stations in Connecticut have applied for and been issued emergency vehicle placards which would permit their personnel and vehicles to move into stricken areas after disaster. That is a good start. This identification system supplements the Civil Defense policy of honoring all working press passes; two special identification placards are being issued to each newspaper and radio station making the request.

In Pennsylvania, it is a rare city or town, let alone county, which includes a Public Information Officer on its staff—by which we mean a working and contributing individual, not a name on a letterhead.

Let us be sure that we all understand what "Public Information" means, why it is necessary, and of what it consists. By "Public Information" we do NOT mean "ballyhoo"; we do not mean a lot of newspaper coverage about things as yet undone but merely proposed; we do not mean photographs of CD officials shaking each other's hands, or sitting for group pictures. In short, we are not talking about publicity, or advertising.

The job of a *good* Civil Defense Public Information Officer (PIO) falls into two parts:

1) To educate the people of his city, town, county, or borough, regarding what Civil Defense is, why it is *and will remain* necessary, and what they, as individuals, must do about it, both at home and at their place of work.

2) To lay plans and develop an integrated network of channels with local press and radio, so that immediately following any attack, he would be in a position to disseminate necessary instructions, orders and directions.

The problem posed by Mission Number One is one of adult education on a scale seldom before visualized. We must think of it as a long-haul maintenance of interest over what may be a period stretching into years.

The responsibility posed by Mission Number Two is awesome. It will be through the PIO and his pre-planning that it either will or will not be possible to direct and inform the public in the chaos following attack.

The wise PIO (whether for county or township) will not try to do the job alone. He will set up a small working group including:

1) A radio-TV man or woman.
2) An advertising-media man or woman.
3) A press and periodical writer.
4) A contact person to work with clubs and organizations, handling films, speakers, liaison with other divisions, etc.

These people should be welcome at all phases of CD growth in the locality; they should be kept supplied with all available information as it is received by the County Director.

A small working committee of this sort would relieve the PIO of much routine detail and thus leave him relatively free to coordinate the overall planning, and to develop the alert and post-attack phases of the program.

As we have seen, a sudden enemy attack, disrupting and ripping apart our lives, would put a tremendous responsibility on the man or woman in charge of Public Information. If he (or she) is not preparing for that responsibility right now, he could be caught desperately short and woefully fail his people. Any County or City Director who thinks he can handle the job in addition to his other demands, reveals a lack of understanding of the pressures he will be under, or the magnitude of the PIO job, or both.

Careful plans *must* be made for getting accurate word and instructions to the public with all possible speed. Otherwise the panic, and confusion, and flood of false rumors will be unspeakable.

It must be accepted that the PIO is in the staff chain of command; therefore it follows that he should be notified in the relay which alerts other staff personnel, with the same priority as that given to a Division Director.

1) On the receipt of a Yellow Alert, the PIO should go *at once* to the Control Center.

2) Pre-designated key members of the local radio and newspapers should be alerted and lines of communication established for the receipt of authoritative reports.

3) A system of code identification of all messages should have been established *prior to the alert period* since verification at the point of receipt will otherwise be difficult due to communications restrictions.

4) If special equipment, such as sound trucks, motor cycle messengers, etc., will be used, these should be alerted.

5) During an alert, widespread instructions will go out over the Conelrad stations (640 and 1260). However, local radio and TV stations should also be given discs and films made by people well-known and respected *locally* in order to calm, instruct, and reassure the people. Such records would be used to supplement what "live" material might be available. Such local platters might include warnings to stay off the roads, to remain home if possible, listings of local Mass Care Centers, announcements regarding blood donor locations (preplanned), requests for First Aiders to report to pre-designated locations, etc. Stations will be clamoring for word if attack occurs. Some stand-by material prepared in advance and pertinent to the locality is an imperative MUST, to fill in the time that will necessarily elapse between a strike and verified details concerning that attack. Lists of locations for Mass Care Centers, emergency hospitals, routes that will be closed, etc., should also be supplied in advance to all newspapers so that they could include them in fast emergency editions.

6) All available police sound cars should cruise the streets immediately following a Red Alert, to give final instructions, and help to get people

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> "Two-fifths of Britain's revenue and one person in eleven of her working population is absorbed by her defense effort," according to General Sir Frank Simpson, former Commandant of the Imperial Defense College. "The defense effort," he continued, "is costing every man, woman and child in Britain $100.00 a year."

## SWEDEN UNDERGROUND

*(Continued from page 4)*

tailed plans, which envisage transport of citizens inland by every means from planes to skis. Vast tunnels are being built to form giant air-raid shelters in an expanding network threading under Sweden. Many thousand people could live indefinitely during periods of sustained air raids. All the necessities of a city are included, among them a hospital, sanitation, utilities, stores of food and other supplies—even a school. If the ventilators are knocked out, chemicals in the shelter could provide synthetic air for up to ten hours.

Many of these tunnels under Stockholm are to be used as garages as long as there is no war. CD authorities believe that garage fees and concessions will eventually pay for 40% of the cost of these shelters.

Because of its strategic location, its industry and the treasure in its minerals and forests, Sweden would be a rich prospect for conquest. The Swedes know that, having followed a policy of neutrality and made no alliances, they must be ready to defend themselves unaided.

Between two world wars they began hacking extensively into the granite that underlies them, and even by 1945 had developed an extensive underground system.

The Soder hospital of 1599 beds, Europe's largest, is duplicated underground, and so are others. Fleet, Swedish-made jet fighters, estimated to total 1500 planes are housed in underground hangars. Underground Army emplacements guard the Baltic coast. The Swedes are boring the latest in subterranean innovations, an underground Navy yard. Pens driven in rocky coasts shelter destroyers, motor torpedo boats and submarines.

Many key factories and mines are ready to operate entirely underground. Far to the north, the Harspranger power plant, one of the world's largest, is buried in solid rock. To support industry in case of attack, large stockpiles of materials like rubber, oil products, tungsten and chemicals are being gathered from abroad and stored underground.

Such efforts are costly and dogged by shortages of manpower, as well as supplies, but armed neutrality is still popular in Sweden. The government is also mindful that south Sweden is but four minutes' flight from Soviet jet bases on a Baltic sea coast bristling from Leningrad almost to Copenhagen.

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## A KEY FIGURE

*(Continued from page 7)*

off the streets and into shelters. After the All-Clear, these cars can play a useful role again in controlling and informing the people. If such plans are not being made by the police service in your area, it is suggested that this type of planning be coordinated with them.

*Important*

All means of disseminating public information should be kept under the closest surveillance of the Civil Defense authorities in order to prevent sabotage or willful development of unnecessary chaos or confusion.

It must be remembered that the enemy is particularly skillful in this type of tactics. The immediate post-attack period, with its inevitable fear, confusion and disorder, will be a particularly dangerous time for this sort of enemy activity. Misleading or confusing reports could be disastrous if considered as "authoritative."

### Start at the Bottom

"Even with an H-bomb, a fifteen-minute warning to a disciplined public would make possible a great reduction of casualties." This is the report of the Operations Research Office of Johns Hopkins University, which has just completed a five-year, Army-authorized study of civil defense.

Specifically it indicates the enormous importance of civil defense and its acceptance by the public to the point of training in what must be done at the first alarm. "This is a problem whose solution must start at the bottom, rather than the top," said Dr. Ellis A. Johnson, director of the Office.

## NATIONAL ALERT

*(Continued from page 1)*

Federal Communications Commission and other government agencies are co-operating. Although numerous smaller exercises have been conducted in the past, the coming test will be the first in which all the states and the Federal government will take part at the same time.

Let us not, however, get lost in the magnitude of the exercise. For each of us, whether we be a County or a Township Director, a warden in an office building, a First Aider, or a canteen worker in a Mass Care Center, the test is for us a *local* problem. Each individual has his or her place to be, his or her job to do, in a specific building in a specific town. Let us each get the greatest possible value from this alert; we will get out of it what we are willing to put into it. Work out your inventories now, and get busy with your local planning, be it in your plant, your hospital, your town, or your private home.

As the weapons of war increase in power, the need for a trained, organized, cool-minded public becomes increasingly important. Every person who cooperates willingly, to the maximum of his ability, is helping to build this type of citizenry.

A television device for making mass blood counts at high speed of persons exposed to radiation of atomic blasts has been announced by RCA. The company said that an operator, using the device called a sanguinometer, could complete almost instantaneously a blood count that normally is a laborious and time-consuming process in the lab.